New Stem Cell Lines Created from Testes Biopsy

Posted: October 16, 2008

Created: 16/10/2008 - 11:54

Researchers at Stanford University School of Medicine have created new stem cell lines from cells found in the human testes. Like embryonic stem cells, these cell lines are pluripotent, which means that they can form all cell types in the adult body. The work follows similar research finding that adult stem cells in mouse testes can be reprogrammed into pluripotent cells. However, the researchers found that the cells differed from embryonic stem cells in several important ways. This is in contrast to a recent paper in Nature finding that the testes-derived stem cells are equivalent to their embryonic counterparts. The researchers suggest that different conditions in the lab may create cells that are more similar to truly pluripotent embryonic cells. Despite the differences, these reprogrammed stem cells cells could be a source of new sperm in men who become infertile due to chemotherapy. They could also one day become a source of stem cells for patient-specific transplants.

Stem Cells: October 16, 2009 (online publication)
CIRM funding: Renee Reijo Pera (RC1-00137)

Related Information: Press Release, Stanford Stem Cell Biology and Regenerative Medicine Institute, Pera bio

Tags: Reijo Pera, Creating New Stem Cell Lines, Stanford University, Comprehensive